

Nuclear Power Plant Decommissioning and Radioactive Waste Disposal

This Overview presents basic information about the status of Wisconsin's current nuclear power plants, the radioactive wastes produced by these plants, how the wastes are handled, and what would happen to the waste if a nuclear plant shuts down. The PSC provides technical information in its Overview pamphlets as background material for government officials and the public who are interested in the status of Wisconsin's electric utility system.

Introduction

Currently in Wisconsin, there are three nuclear power plants. Point Beach Nuclear Power Plant, and the Kewaunee Nuclear Power Plant are operational. The La Crosse Boiling Water Reactor in Genoa is owned by the Dairyland Power Cooperative and was permanently shut down in 1987. There are two units at Point Beach with a total capacity of approximately 1,030 megawatts (MW). The Kewaunee Nuclear Power Plant (Kewaunee) is a single unit located near Kewaunee. The Kewaunee unit has a capacity of approximately 575 MW. Nuclear power in Wisconsin produces approximately 20 percent of the state's electricity on an annual basis.

Current nuclear licenses

Kewaunee and Point Beach Nuclear Power Plant (Point Beach) are licensed by the Nuclear Regulatory Commission (NRC) to operate until 2010 to 2013, depending on the reactor unit. In 2004, the owner of Point Beach applied for a license renewal to allow it to operate the nuclear plant for another 20 years. The owner of Kewaunee will decide in the next few years whether to apply for license renewal or shut down the plant permanently at the end of its current license.

Role of the Public Service Commission

The Public Service Commission (PSC) has no direct jurisdiction over license renewal, safety, nuclear wastes, or the transportation of those wastes. These issues are regulated by the NRC. However, the PSC must approve all utility expenditures related to plant construction, operation, maintenance, and decommissioning, as well as costs for license renewal and facility improvements. The environmental effects related to plant construction, maintenance, or expansion is also reviewed by the PSC. The PSC must determine if the utility's proposed actions and the related expenditures are in the public interest.

Low-Level Radioactive Wastes

Nuclear power plants produce two kinds of radioactive wastes, low-level and high-level.

Low-level radioactive wastes are produced by nuclear power plants, hospitals, medical and educational research institutions, biomedical companies, and other commercial activities that use radioactive materials. There are three classes of low-level radioactive wastes. (See Table 1)

Table 1 Classes of low-level radioactive waste

Waste Class	Contents	Percent of Waste in 1995	Decay	Special Disposal Concerns
A	Mostly short half-life elements in protective clothing, paper, and lab trash.	97	Intruder to the disposal area would not receive excessive radiation exposure after 100 years.	No
B	Short and long half-life elements, in greater quantities.	2	Intruder would not receive excessive radiation after 100 years.	Must remain stable for 300 years. Usually stabilized in special cement.
C	Nuclear reactor shell, sealed sources, other high activity industrial waste.	1	Intruder would not receive excessive radiation exposure after 500 years.	Must remain stable for at least 300 years. Usually stabilized in special cement. Must be deeper disposal and protected from intruders for 500 years.

Low-level radioactive waste disposal facilities

There are three existing low-level waste disposal facilities in the United States that accept various classes of low-level waste. In 1980, Congress passed the Low Level Waste Policy Act, which made low-level radioactive waste disposal a state responsibility. The purpose of the act was to encourage states to construct and manage low-level disposal facilities. In order to accomplish this task, the states organized themselves into ten regional compacts, leaving nine states unaffiliated. Wisconsin is a member of the Midwest Compact, along with Minnesota, Iowa, Missouri, Indiana, and Ohio. Missouri recently dropped out of the Midwest Compact.

The Low Level Waste Policy Act was amended in 1985 to give states more time to build new disposal sites. Since the formation of these compacts, no new low-level radioactive waste disposal facilities have been sited or constructed.

The existing low-level disposal facilities are Hanford in Washington, Barnwell in South Carolina, and Envirocare in Utah. Hanford accepts wastes from the ten states in the Northwest and Rocky Mountain compacts. Hanford accepts Class “A,” “B,” and “C” wastes.

Barnwell also accepts Class “A,” “B,” and “C” radioactive wastes from all U.S. generators except those in the Rocky Mountain compact and the Northwest compact. Beginning in 2008, Barnwell will only accept waste from the Atlantic compact states.

The third disposal site, Envirocare, accepts only class “A” radioactive wastes but from any U.S. generator.

Siting a new low-level radioactive waste disposal facility

There are numerous issues associated with siting a new low-level radioactive waste disposal facility. They should not, for instance, be where population growth or mineral exploration would affect the ability of the site to

meet performance objectives. Sites must be free of flooding and far enough above the water table to prevent water intrusion into the disposal area. Siting should avoid geological risks such as volcanoes, earthquakes, landslides, slumps, or massive erosion. Passive controls (markers, land records, soils, geology, containers) would need to meet performance objectives for the next 400 years. At the disposal site, waste might be put inside concrete cylinders or boxes to reduce site worker radiation exposure and to prevent future soil slumping if a container fails.

Fees for disposal at the existing sites have increased substantially over the last ten years. Consequently low-level radioactive waste generators have significantly reduced waste volumes to save money. The Midwest Compact region generators have reduced volumes by 76 percent, using a variety of techniques, including:

- more rigorous monitoring and separation of contaminated from non-contaminated wastes
- compaction
- incineration
- cleaning with acid
- steam reforming

As waste volumes have decreased, the economics of opening a new regional disposal site have become more questionable. The cost of identifying, constructing, licensing, and operating a site must be recovered from fees charged for disposal.

Some new disposal siting activities are on hold or being challenged. The economic advisability of licensing and operating a new disposal site in Nebraska has been questioned because low-level radioactive waste can be sent to existing sites for the next 20 years. Siting efforts in North Carolina, the Appalachian Compact, Connecticut, Massachusetts, and New York have all been redirected or halted in part because of questions about the need for new sites. The Barnwell waste site in South Carolina has 20 years of capacity left but beginning in 2008, Barnwell will only accept wastes from the Atlantic Compact states (Connecticut, New Jersey, and South Carolina). The Envirocare facility in Utah is amending its license to accept waste with higher levels of radioactivity. The cost of a new site would be very high relative to the sites that exist. It is estimated that the current cost to site a new low-level radioactive waste facility, license it, and operate it is between \$105 and \$216 million.

The Midwest Compact which includes Wisconsin recently decided to stop siting activities in Ohio because: (1) the costs of site characterization was increasing millions of dollars per year; (2) disposal fees could be high; and (3) it appeared that existing facilities would be accepting wastes for another 20 years. The Midwest Compact Commission plans to continue meeting twice a year, and when circumstances change, may renew its siting activities.

High-level Radioactive Waste - Spent Fuel

Fuel used in nuclear power plants is routinely used for three to four cycles of reactor operation, until it can no longer produce enough heat to generate electricity. When fuel is removed from the reactor for the last time, it is stored in a “spent fuel” pool at the power plant for a minimum of five to seven years. The spent fuel is considered high-level radioactive waste.

After being stored in the spent fuel pool for five to seven years, a typical spent fuel assembly is cool enough (in terms of both heat and radioactivity) to be put into dry storage, if necessary. Ultimately, the U.S. Department of Energy (DOE) is responsible for disposal or intermediate storage for spent fuel.

However until the DOE accepts the spent fuel, each utility that operates a nuclear plant is responsible for the spent fuel it produces. The utility must store the fuel in a spent fuel pool and/or NRC-approved dry casks. In Wisconsin, the utility ratepayers pay for this storage.

Status of spent fuel storage at Wisconsin nuclear power plants

Kewaunee Nuclear Power Plant

The Kewaunee spent fuel pool was originally designed to serve two units instead of the existing one unit. Thus, the spent fuel canal that connects the spent fuel pool to the reactor has a “dead end” section extending to where the second reactor was expected to be located. Spent fuel storage racks were placed in this section in 2000.

When Kewaunee’s license expires in 2013, it is expected to have a total of 1,305 spent fuel assemblies, approximately 100 more assemblies than the capacity of the current racking in the spent fuel pool. The racking in the spent fuel pool can currently hold 1,205 fuel assemblies. Additionally, sometime in 2009 or 2010, the spent fuel pool will become too full to allow the plant to move a full core from the reactor to the spent fuel pool which is required for specific maintenance activities.

Point Beach Nuclear Power Plant

In 1995, the PSC authorized the use of up to 12 “dry storage casks” for spent fuel storage and the construction of concrete pads that are capable of holding another 48 casks. Use of the spent fuel pool and 48 casks would allow Point Beach to operate each of its units until the end of its operating license. Currently, the NRC license for Point Beach Unit 1 expires on October 10, 2010. The license for Unit 2 expires on March 8, 2013. In February 2004, the plant’s operators applied for a license extension for the two units. If approved, the extended licenses would expire in 2030 and 2033 for Units 1 and 2, respectively.

Upon decommissioning, construction of an additional 102 casks would be necessary to allow the utility to empty the spent fuel pool. In 2000, the owner of Point Beach applied to the Commission for authority to construct and use 36 additional dry storage casks (for a total of 48). The Commission approved WEPCO’s request on March 28, 2001.

LaCrosse Boiling Water Reactor

The LaCrosse Boiling Water Reactor was shut down in 1987 after operating for almost 20 years. Dairyland Power Cooperative is doing limited dismantlement of equipment and systems that are no longer needed. The plant is in safe storage. The spent fuel storage pool is inside the containment building. This plant cannot be decommissioned until all of the spent fuel has been removed from the pool. There are a total of 333 spent fuel assemblies waiting to be removed from the pool.¹

Safety issues related to spent fuel pool storage

There are three major safety issues related with storing spent fuel in a pool: (1) the potential degradation of Boraflex in the spent fuel racks; (2) the possibility of dropping a heavy load of fuel on a fuel rack as it is being moved over the spent fuel pool; and (3) the loss of water from the spent fuel pool to the extent that spent fuel is exposed.

Boraflex is attached to spent fuel racks to absorb neutrons. Boraflex is made of boron in a silicon rubber matrix. Long-term storage of spent fuel in pools exposes the Boraflex to water and gamma radiation and can result in the degradation of the Boraflex. A reduction in the amount of Boraflex could result in the plant exceeding an NRC design criterion related to the safety of fuel storage and handling. Degradation of the Boraflex is prevented by monitoring the concentration of silica in the pool water.

If heavy loads are moved across the top of the spent fuel pool, a dropped load could damage spent fuel, the pool structure, or the piping connected to the pool. Using fail-safe hooks, proper rigging, and avoiding unnecessary movement of heavy loads near the spent fuel pool can prevent such events.

Spent fuel is stored in pools of water so that the heat generated by the fuel is effectively dissipated and as a means to attenuate the radiation levels in the spent fuel pool area. In an operating plant, the improper operation of the piping systems can cause a loss of water from the spent fuel pool. Water can also be lost through the fuel transfer canal to the reactor refueling cavity, which is at a lower elevation than the spent fuel pool itself. In a closed plant, pipes can freeze and break, if heating is not maintained. If pipes break at an elevation below the

¹ Appendix A, Table A-7, Department of Energy, Final Environmental Impact Statement, Vol. 2, February 2002.
http://ocrwm.doe.gov/documents/feis_2/vol_2/apndx_a/apndx_a.htm

pool water level, the volume of water in the pool could be reduced. Lowered water levels in the pool could expose the spent fuel.

Spent fuel storage in dry casks

As the pools began to fill up with spent fuel in the late 1970s, alternative storage technologies were sought. The goal was a modular system that might facilitate later transport to a permanent disposal site.

In 1982, the Nuclear Waste Policy Act was passed directing the NRC to approve a means of dry storage for the period before DOE begins accepting the spent fuel for permanent storage. The NRC developed procedures to review dry cask designs for safety. Once a dry cask has a general NRC license, a utility can use the cask at its reactor site without obtaining a site-specific NRC license for dry cask use. In Wisconsin, PSC-approval is also required prior to construction of dry cask storage facilities.

Casks are licensed by the NRC for use as transportation containers only, storage containers only, or approvable for use in storing and transporting spent nuclear fuel. All utility actions related to use of dry storage casks are subject to NRC oversight and inspection.

Information about the casks currently licensed for use by the NRC can be found on the NRC web site at www.nrc.gov/waste/spent-fuel-storage/designs.html.

Transportation of Spent Fuel

Transportation-approved casks

The NRC regulates the safety of the transport casks in which spent fuel is shipped. The NRC licenses cask design and inspects cask fabrication plants. Each license lasts five years and can be renewed. Casks used for transportation are designed to provide a barrier to radiation that prevents unsafe exposure to the driver, train crew, and the public. The cask's shields block gamma rays and neutrons. The casks are also designed to transfer heat to the outside.

In case of accident, casks approved for transportation are designed to prevent a release of radioactive material to the environment. They must be able to withstand being dropped from 30 feet, landing on a vertical rod six inches in diameter, being exposed for 30 minutes to a 1,475°F fire, and being immersed under 50 feet of water for 8 hours and under 655 feet of water for 1 hour.

Sandia National Laboratories conducted a series of tests on several transport cask designs. None of the tested spent fuel casks were damaged enough to release radioactivity to the environment. The tests involved:

- A tractor-trailer rig carrying a cask and crashing into a concrete barrier at 60 and 80 mph.
- A 120-ton locomotive going 80 mph and colliding with a cask on a truck at a crossing.
- A high-speed impact followed by a 30-minute diesel fire.

Regulating the transport of spent nuclear fuel

Spent fuel can be transported by truck or by train. The NRC and the U.S. Department of Transportation (USDOT) regulate the shipment of spent nuclear fuel. The USDOT is responsible for route selection, vehicle condition, vehicle labeling, driver training, and package marking. The NRC approves transportation routes and requires protection measures such as notification of the NRC in advance of shipment. State governors or their designees are also notified at least four days before the shipment. The DOE has proposed satellite tracking of shipments.

The USDOT has identified preferred routes for truck transport of spent fuel and has identified guidelines for states and tribes to use in selecting alternative routes. The preferred routes are interstate highways between centers of population, unless the affected state specifies a different route. The state determines the route around major cities. In Wisconsin, the state agency with oversight responsibility for the transport of spent nuclear fuel is the State Patrol.

Train routes are determined by the shipper and the railroad. Track conditions are considered when picking a route. If a dedicated train is used, the train stops only for fuel, to change crews, and sometimes to change or add locomotives, as it would when approaching mountains.

The USDOT administers grants for planning and emergency training on transport of hazardous materials, including spent nuclear fuel. The DOE plans to make additional training money available to states, counties, and tribes three to five years prior to shipping spent nuclear fuel to the designated repository or an interim storage site.

Current shipments of spent nuclear fuel

Spent nuclear fuel is sometimes shipped to another nuclear facility with more spent fuel storage space. Spent nuclear fuel is also shipped to research facilities for testing. Over the last 30 years, there have been thousands of shipments of spent nuclear fuel by both truck and rail throughout the United States. Though there have been some accidents, none have caused a radiological release to the environment or harm to the public. The number of spent nuclear fuel shipments is expected to significantly increase with the completion of the high-level waste repository at Yucca Mountain.

Permanent Federal Repository of Spent Nuclear Fuel

As of December 1998, approximately 38,400 metric tons of spent fuel has accumulated at the nation's utility reactors. If all reactors were to operate for their full 40-year license period, the amount of nuclear wastes would more than double.

The DOE is responsible for developing a system to manage the disposal of high-level radioactive waste and spent nuclear fuel. According to 10 CFR Part 960 of the federal code, the DOE must develop a repository for high-level waste and spent nuclear fuel.

The Nuclear Waste Fund

Under the Nuclear Waste Policy Act of 1982 as amended in 1987, a contract was created between the electric utilities and the federal government. Electric utilities would pay into a Nuclear Waste Fund, 10 cents for every 100 kilowatt of electricity generated by nuclear power plants. The money would be paid in advance and in return, the federal government would develop a permanent repository to receive spent fuel from the utilities. The utilities' payments were intended for studying, licensing, constructing, and operating a spent nuclear fuel repository. The DOE was supposed to begin accepting spent fuel from the utilities on January 31, 1998. So far, the nation's electric utilities have paid over \$19 billion dollars (including interest) to the Nuclear Waste Fund. As of March, 31 2004, Wisconsin nuclear power plants have paid \$342.8 million. Interest accumulated on the Wisconsin portion of the Nuclear Waste Fund has added another \$203.7 million. Congress has released some of the funds to DOE through the federal budget appropriations process. The rest of the fund (the amount collected but not released to DOE) is currently being used to offset the federal deficit.

When the January 31, 1998, deadline passed, a combination of utilities and state agencies sued the DOE, requesting the court to order the DOE to begin taking spent fuel. The court ordered the DOE to begin performing the actions required by terms of the act, to begin taking the spent fuel. The DOE has not yet accepted spent fuel from any utilities. It has taken, and is storing, spent fuel from Navy vessels and foreign research reactors where the U.S. government supplied the fuel.

Regulatory responsibilities for spent fuel repository

The regulatory responsibility for spent nuclear fuel disposal is as follows:

- DOE is responsible for developing permanent disposal capacity for spent fuel and other high-level radioactive waste.
- The U. S. Environmental Protection Agency (EPA) is responsible for developing environmental standards to evaluate the safety of a geologic repository.

- NRC is responsible for developing regulations to implement the EPA safety standards and for licensing the repository.

The EPA contracted with the National Academy of Sciences (NAS) to advise them of the appropriate technical basis for public health and safety standards for the Yucca Mountain repository. NAS issued this study, entitled “Technical Bases for Yucca Mountain Standards,” on August 1, 1995.

According to 40 CFR Part 197, the EPA is responsible for developing appropriate radiation protection standards for management and disposal of high-level radioactive waste and spent nuclear fuel. It was directed to issue standards a year after the NAS study was published in 1996. The proposed EPA standards went out for public comment in 1999. Challenges in court have delayed finalizing the standards.

The NRC technical criteria specified in 10 CFR Part 60 must be consistent with the new EPA standards. Otherwise, NRC must issue new standards within a year of the publication of the revised EPA standards. The NRC is the organization that will issue a license for the spent fuel repository and ensure that the DOE meets the EPA standards. The NRC must find that public health and safety has been adequately protected. The regulations in 10 CFR Part 60 govern pre-licensing activities, authorization to begin construction of a facility, a license to receive and place spent fuel and high-level waste in a facility, and a license to close a facility. The NRC would also license any interim storage facility for spent fuel, and licenses spent fuel transportation casks.

The U.S. General Accounting Office (GAC) must audit the DOE’s programs and its progress in licensing a high-level waste and spent fuel repository. The GAC must then publish the findings of the audit.

The Nuclear Waste Technical Review Board is independent of the DOE and other governmental agencies and provides an independent review of DOE work products. It was created to advise Congress and the Secretary of Energy on issues related to high-level waste and spent fuel disposal.

Yucca Mountain Repository

In 1983, the DOE selected nine potential sites for the nation’s first long-term geologic repository for spent nuclear fuel and high-level radioactive wastes. The repository would store the spent fuel from utility and research reactors and waste from military reactors. These wastes are currently being stored at 131 different sites in the nation. In 1986, three sites were approved by the president for further study: Yucca Mountain, Nevada; Deaf Smith County, Texas; and Hanford, Washington.

The only site being currently investigated as a permanent repository is Yucca Mountain. Yucca Mountain is located in southern Nevada, about 100 miles northwest of Las Vegas. The DOE began studying Yucca Mountain in 1978.

Several aspects of the Yucca Mountain repository site (water movement, effects of heat on water movement, and chemistry, for example) are still being studied. A viability assessment that identified where more work is needed was issued in December 1998.

On July 9, 2002, the U.S. Senate cast the final legislature vote approving the development of a nuclear waste repository at Yucca Mountain. On July 23, 2002, President Bush signed House Joint Resolution 87, allowing the DOE to take the next step in establishing a safe repository in which to store our nation's nuclear waste.

The next step in the repository’s development is for DOE to submit a license application to the NRC. It will be accompanied by an Environmental Impact Statement (EIS) in support of receiving construction authorization and, ultimately, a license to receive and possess waste. The EPA is responsible for the reviewing the EIS.

DOE intends to submit a license application to the NRC by year-end 2004.

Nuclear Power Plant Decommissioning

End-of-life options for nuclear plants

When a nuclear power plant becomes uneconomic to operate or reaches the end of its 40-year license with the NRC, the plant either: (1) begins “decommissioning” and is dismantled; or (2) is put into storage, called SAFSTOR, for decommissioning at a later date. As an alternative to ceasing operation of the plant, the licensee

may apply to the NRC for a 20-year extension of the license. The NRC states that decommissioning must be completed within 60 years of when the nuclear power plant shuts down.

In deferred decommissioning, or SAFSTOR, the facility is kept in a safe, non-operating, environmentally sound condition while the radiation decays and until it is ready to be dismantled. SAFSTOR is most commonly used when one unit at a multi-unit site shuts down. One advantage of SAFSTOR is that some of the radioactivity has decayed so that occupational radiation exposures associated with decommissioning the plant are less than with immediate decommissioning. The disadvantages of SAFSTOR are that equipment needed during decommissioning may degrade in storage, costs of low level radioactive waste disposal will be higher, and insurance premiums must be paid for a longer time.

The advantages of immediate dismantlement are that experienced plant workers participate in the decommissioning, costs of low-level radioactive waste disposal are known, equipment needed for decommissioning is in good shape, and insurance premiums are paid for a relatively short time.

The status of decommissioning in the U.S. and Wisconsin

NRC has identified several decommissioning issues that will need rulemaking. Three issues, decommissioning, financial assurance, and radiation site release criteria are currently in the rule-making process. Four upcoming additional topics are decommissioning costs, insurance coverage for permanently shutdown reactors, physical protection for storage of spent fuel at permanently shutdown reactors, and operators and plant staffing for decommissioning reactors.

The PSC reviews the expected cost of decommissioning every four years to determine whether the amount of money collected from ratepayers to pay for decommissioning should be changed. The review includes a formal hearing. Funds collected in rates for decommissioning are set aside in a decommissioning account. Decommissioning funds can be invested in common stocks and investment grade fixed income securities. The percentage of the decommissioning funds that may be invested in common stocks varies by utility. However, no more than 5 percent of the funds may be invested in a single company.

According to the NRC web site, as of July 2004, 19 power reactors were permanently shut down and in various stages of decommissioning. A public meeting was held in May 1998 on the decommissioning plan for the La Crosse Boiling Water Reactor in Genoa. The NRC approved a SAFSTOR decommissioning plan for this plant on August 7, 1991. This plant was shut down on April 30, 1987.

The owners of the Kewaunee will most likely apply for a 20-year NRC license extension when the current license expires in 2013. The owner of the Point Beach Nuclear Power Plant has applied for a 20-year extension of its operating license. The current Point Beach Nuclear Power Plant NRC licenses expire in 2010 and 2013.

The decommissioning process

The NRC must be notified within 30 days after a nuclear power plant unit is permanently shut down. Another written notification must be submitted when the spent nuclear fuel is permanently removed from the reactor. Within two years after notifying the NRC that a plant is permanently shut down, the owner must submit to the NRC a post-shutdown decommissioning activities report (PSDAR). This report provides a description of the planned decommissioning activities, a schedule for accomplishing them, and an estimate of the expected costs. When a PSDAR is received by the NRC, it publishes a notice of receipt in the Federal Register, makes the report available for public review and comment, and holds a public meeting near the plant.

Ninety days after NRC receives the PSDAR, decommissioning may begin. Without specific NRC approval, decommissioning activities are limited to those that do not: (1) foreclose the release of the site for unrestricted use, (2) result in excessive use of the decommissioning funds, or (3) cause environmental impacts that have not already been subject to review. If any of these effects might occur, the plant owner must submit a license amendment to the NRC.

- Decommissioning activities include:
- Decontaminating large metal parts (steam generators or large pipes, for example).

- Removing insulation around piping.
- Removing the surface one or two inches of concrete to remove the radioactive contaminated portion.
- Dismantling the plant.
- Shipping uncontaminated pieces to scrap metal users or landfills.
- Shipping radioactive parts to a low-level radioactive waste disposal site.

Some parts (internal parts) are too radioactive for disposal in a low-level radioactive waste disposal site. These parts and the spent nuclear fuel must be sent to a federal high-level nuclear waste disposal facility, whenever such a site opens.

Decontaminating metal parts reduces the cost of decommissioning. Metal is decontaminated by repeated washing with a dilute acid (nitric or formic acid). The acid dissolves the radioactive contamination, and also some of the base metal to release radioactive contamination in microscopic fissures. The radioactive compounds and metal are removed from the acid solution in ion exchange columns. The water is removed from the resins in those columns and the radioactive material is packed into a “High Integrity Container” and shipped to a low-level radioactive waste disposal site. Use of this technique should substantially reduce the volume of material that is sent to a low-level radioactive waste site.

The plant owner is also required to submit to the NRC a License Termination Plan (LTP) within two years of the expected license termination. The LTP requires the approval of the NRC in the form of a license amendment. Before NRC approval can be given, an opportunity for hearing is published and a public meeting is held near the plant site.

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PSC Overview Series

The Public Service Commission has prepared other pamphlets for important electric issues that can be viewed on the PSC website: <http://psc.wi.gov>.

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